

ABSTRACT

The present invention provides methods and vector systems for the generation of chimeric recombinant adenoviruses. These hybrid adenoviruses contain a genome that is derived from different adenovirus serotypes. In particular, novel hybrid adenoviruses are disclosed with improved properties for gene therapy purposes. These properties include: a decreased sensitivity towards neutralizing antibodies, a modified host range, a change in the titer to which adenovirus can be grown, the ability to escape trapping in the liver upon in vivo systemic delivery, and absence or decreased infection of antigen presenting cells (APC) of the immune system, such as macrophages or dendritic cells. These chimeric adenoviruses thus represent improved tools for gene therapy and vaccination since they overcome the limitations observed with the currently used serotype subgroup C adenoviruses.